



UNITED STATES MARINE CORPS

MARINE CORPS AIR STATION
PSC BOX 8003
CHERRY POINT, NORTH CAROLINA 28533-0003

AirStaO 5100.12

LSSO

21 MAY 1997

AIR STATION ORDER 5100.12

From: Commanding General

To: Distribution List

Subj: LASER HAZARD CONTROL PROGRAM

Ref: (a) MCO 5104.1
(b) SPAWARINST 5100.12B
(c) SECNAVINST 5100.14B
(d) ANSI Z136.1-1993
(e) NAVMEDCOMINST 6470.2A

1. Purpose. To issue policy and guidance concerning the establishment of local laser hazards control programs.
2. Scope. This Order is applicable to all activities/tenant commands aboard MCAS Cherry Point, its auxiliary landing fields, and range areas that operate or maintain laser systems.
3. Background. As laser systems become more numerous, solid laser radiation hazards prevention programs are key to assuring a mishap-free workplace. The references prescribe policy and guidance in the identification and control of laser radiation hazards. It applies to the design, use and disposal of all equipment and systems capable of producing laser radiation including laser fiber optics. It also issues guidance on establishing a command laser hazard control program including requirements for a Laser System Safety Officer (LSSO), personnel training, laser engineering protective eye-wear, laser warning signs and administrative and engineering protective measures. References (a) and (e) establish medical surveillance requirements, and notification procedures for personnel exposed to laser radiation.
4. Action. Local Laser Safety Organization's (LLSO) will be established within each activity/tenant command that possesses, operates, maintains or trains with laser devices. The LLSO will be incorporated within existing safety elements to the maximum extent possible. Technical expertise and the LSSO may be drawn from an

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available source within each unit; however, each will function through the organization's existing safety establishment.

a. An Air Station LSSO shall be appointed in writing. The Air Station LSSO shall be a graduate of an approved Category I Laser Systems Safety Officer Course and shall have direct access to the Commanding General on all laser safety matters. Duties shall include:

(1) Review this order annually and update as necessary.

(2) Complete/maintain Laser Data Worksheets for all lasers utilized on the Air Station, its auxiliary landing fields and range areas, and disseminate them to the appropriate activities.

(3) Coordinate/conduct CAT II Laser Systems Safety Officer training as needed.

(4) Maintain copies of flight clearances and Safety Review Board findings on each laser system used on the Air Station or ranges operated by the Air Station Wing.

(5) Consolidate input from each unit and tenant command and submit an annual list of all Class IIIb, Class IV, and all military exempt lasers. This report will be submitted to SPAWARSYSCOM NLT 20 August annually. A copy of this report shall be maintained for two years.

b. An LSSO shall be appointed in writing for any activity/unit using Class IIIb, IV, or military exempt lasers. The Unit/Activity LSSO shall be a graduate of an approved Category II Laser Systems Safety Officer Course and shall have direct access to the Unit/Activity Commanding Officer on all laser safety matters. Duties shall include:

(1) Publish a unit/activity local laser safety program command policy, safety regulations and Standard Operating Procedures, in accordance with this order and references (a) through (e).

(2) Maintain an inventory of all unit/activity held laser devices along a Laser Data Worksheet for each device.

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(3) Maintain copies of flight approvals and Laser Safety Review Board findings on each applicable LASER system.

(4) Maintain a log of all operational, maintenance or training laser firings to include: date, time, location, operator, purpose and personnel present. A log of all airborne firings should include type aircraft and Bureau Number (BUNO), location, heading, altitude, airspeed and designation target.

(5) Maintain a current listing of all personnel who are authorized to engage in laser operations and ensure that each individual is enrolled in the proper medical surveillance program.

(6) Maintain training records of all personnel who engage in laser operations, maintenance or training. These records will be maintained for two years and include times and dates of training received, as well as copies of designations and assignments for laser operations.

(7) Submit an annual list of all Class IIIb, Class IV, and all military exempt lasers to Joint Safety (LSSO) NLT 15 August annually. These report formats can be found in reference (b), enclosures (11) and (12).

5. LASER Safety Training Program

a. All personnel working with laser devices or in areas using or storing Class IIIb, Class IV or equivalent Military Exempt Lasers shall have specific classroom training.

b. Local lesson plans will be submitted to the Air Station LSSO (Joint Safety). Such lesson plans should, at a minimum, encompass all applicable topics contained in enclosure (8) of reference (b).

c. Formal safety school requirements of LSSO's and other necessary laser safety training needed for operations and maintenance will be locally budgeted.

d. Normal laser-related technical training (operations and maintenance) is not applicable under this Order.

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6. Protective Eye-wear

a. All personnel exposed to lasers, either directly or indirectly, are required to wear protective eyewear.

b. All goggles or spectacles must be properly labeled and periodically checked (annually at a minimum). All laser eye protection devices shall have the proper optical density at the appropriate wave lengths for each type of laser being used.

7. Medical Surveillance Program

a. This program is a Naval Medical Department function although the program implementation and reporting of overexposure incidents are the responsibilities of the LSSO.

b. Personnel using or working around class 3b or 4 lasers shall be enrolled in the medical surveillance program as either "laser personnel" or "incidental personnel."

(1) Maintenance personnel whose work with lasers requires them to bypass the safety interlocks and personnel involved in procedures that expose them to an open laser beam, shall be enrolled in the Medical Surveillance Program as "laser personnel."

(2) Operators of fielded military class III(b) or IV systems and aircrew aboard aircraft using class III or IV military laser systems shall be enrolled in the Medical Surveillance Program as "Incidental Personnel."

(3) All other personnel will be categorized per reference (e).

c. Test protocols for personnel designated as "laser personnel" will be conducted per reference (e).

d. Test protocols for personnel designated as "incidental personnel" shall include a preplacement exam that consists of a visual acuity exam and a review of their ocular history, and a termination exam, which consists of a visual acuity only.

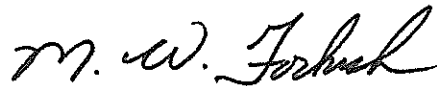
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8. Accidents Investigation/Report Procedures. In the event of an overexposure incident or suspected overexposure incident, the following action shall be taken:

a. An initial notification message reporting any overexposure or suspected overexposure shall be sent to BUMED (MEDCOM 02). A follow-on phone call will be made to inform the chain of command, to include the Air Station LSSO.

b. An investigation shall be conducted by the LSSO with assistance from the Air Station LSSO. If an aircraft mishap investigation is initiated IAW the current edition of OPNAVINST 3750.6, the AMB shall include a Category I LSSO on the investigation board as an adjunct member.

c. Complete reports/MIRs shall be sent, within 30 days, to BUMED (MEDCOM 02) with copies to Joint Safety (DSS/LSSO), COMMARFORLANT (DSS/ALD), CMC (SD), NAVSAFECEN, and SPAWARSSCOM (OOF).



M. W. FORBUSH
Chief of Staff

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